

Title (en)
BATTERY ELECTRODE PLATE DEGREE-OF-ALIGNMENT INSPECTION METHOD AND APPARATUS, AND DEVICE, MEDIUM AND PRODUCT

Title (de)
VERFAHREN UND VORRICHTUNG ZUR ÜBERPRÜFUNG DES AUSRICHTUNGSGRADES EINER BATTERIEELEKTRODENPLATTE SOWIE VORRICHTUNG, MEDIUM UND PRODUKT

Title (fr)
PROCÉDÉ ET APPAREIL D'INSPECTION DE DEGRÉ D'ALIGNEMENT DE PLAQUE D'ÉLECTRODE DE BATTERIE, ET DISPOSITIF, SUPPORT ET PRODUIT

Publication
EP 4287343 A4 20240619 (EN)

Application
EP 22924559 A 20220412

Priority
CN 2022086218 W 20220412

Abstract (en)
[origin: EP4287343A1] Embodiments of the present application provide a method, an apparatus, a device, a medium and a product for detecting alignment of battery electrode plates. The method includes: obtaining depth distances of a target cross section of the battery electrode plates after lamination molding, wherein the target cross section is perpendicular to an electrode plate setting direction of the battery electrode plates, and the depth distances of the target cross section includes the depth distance corresponding to each of the electrode plates; and determining an alignment detection result of the battery electrode plates based on the depth distances of the target cross section. According to embodiments of the present application, the depth distances of the target cross section of the battery electrode plates can be obtained after lamination molding of the battery electrode plates, the depth distances of the target cross section may include the corresponding depth distance of each electrode plate. According to the corresponding depth distance of each electrode plate, the overall alignment of the battery electrode plates after lamination molding can be determined. The battery electrode plates qualified in the detection may be used to perform a subsequent manufacturing process, and the battery electrode plates unqualified in the detection can be treated by waste discharge, so as to ensure the quality of the battery and improve the good product rate of the battery.

IPC 8 full level
H01M 10/0583 (2010.01); **G01B 11/06** (2006.01); **G01B 11/27** (2006.01); **G06T 7/00** (2017.01)

CPC (source: EP US)
G01B 11/272 (2013.01 - EP); **G06T 7/0006** (2013.01 - EP US); **G06T 7/564** (2017.01 - US); **H01M 10/0583** (2013.01 - EP US); **G01B 11/0608** (2013.01 - EP); **G06T 2207/10028** (2013.01 - EP); **G06T 2207/30136** (2013.01 - US); **Y02E 60/10** (2013.01 - EP)

Citation (search report)

- [XAI] CN 112508838 A 20210316 - GUANGDONG LYRIC ROBOT INTELLIGENT AUTOMATION CO LTD
- [XAI] MA TIANYI ET AL: "Application of Computed Tomography in Lithium-ion Battery Detection", JOURNAL OF CHONGQING UNIVERSITY OF TECHNOLOGY(NATURAL SCIENCE),, vol. 2, no. 34, 29 February 2020 (2020-02-29), pages 133 - 139, XP009549630, ISSN: 1674-8425
- See also references of WO 2023197127A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4287343 A1 20231206; **EP 4287343 A4 20240619**; CN 117223146 A 20231212; US 2023377122 A1 20231123; WO 2023197127 A1 20231019

DOCDB simple family (application)
EP 22924559 A 20220412; CN 2022086218 W 20220412; CN 202280032326 A 20220412; US 202318364711 A 20230803